

## STN SEARCH TRANSCRIPT

10/604777

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\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks  
(ROSPATENT) added to list of core patent offices covered  
NEWS 4 FEB 28 PATDPAFULL - New display fields provide for legal status  
data from INPADOC  
NEWS 5 FEB 28 BABS - Current-awareness alerts (SDIs) available  
NEWS 6 FEB 28 MEDLINE/LMEDLINE reloaded  
NEWS 7 MAR 02 GBFULL: New full-text patent database on STN  
NEWS 8 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced  
NEWS 9 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 10 MAR 22 KOREAPAT now updated monthly; patent information enhanced  
NEWS 11 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY  
NEWS 12 MAR 22 PATDPASPC - New patent database available  
NEWS 13 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags  
NEWS 14 APR 04 EPFULL enhanced with additional patent information and new  
fields  
NEWS 15 APR 04 EMBASE - Database reloaded and enhanced  
NEWS 16 APR 18 New CAS Information Use Policies available online  
NEWS 17 APR 25 Patent searching, including current-awareness alerts (SDIs),  
based on application date in CA/CAPLUS and USPATFULL/USPAT2  
may be affected by a change in filing date for U.S.  
applications.  
NEWS 18 APR 28 Improved searching of U.S. Patent Classifications for  
U.S. patent records in CA/CAPLUS  
  
NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005  
  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 14:29:16 ON 29 APR 2005

=> FIEL REG

FIEL IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> FILE REG

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 14:29:26 ON 29 APR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 28 APR 2005 HIGHEST RN 849459-72-9

DICTIONARY FILE UPDATES: 28 APR 2005 HIGHEST RN 849459-72-9

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Crossover limits have been increased. See HELP CROSSOVER for details.

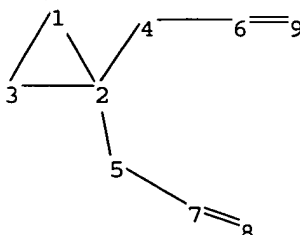
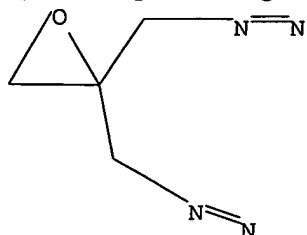
Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=>

Uploading C:\Program Files\Stnexp\Queries\ENERGETIC OXIRANE.str



chain nodes :

4 5 6 7 8 9  
 ring nodes :  
 1 2 3  
 chain bonds :  
 2-4 2-5 4-6 5-7 6-9 7-8  
 ring bonds :  
 1-2 1-3 2-3  
 exact/norm bonds :  
 1-2 1-3 2-3 4-6 5-7 6-9 7-8  
 exact bonds :  
 2-4 2-5

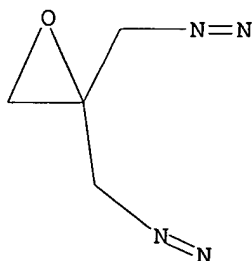
Match level :  
 1:Atom 2:Atom 3:Atom 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

L1 STRUCTURE UPLOADED

=> que L1

L2 QUE L1

=> D L2  
 L2 HAS NO ANSWERS  
 L1 STR



Structure attributes must be viewed using STN Express query preparation.  
 L2 QUE ABB=ON PLU=ON L1

=> S L2 SSS FULL  
 FULL SEARCH INITIATED 14:29:40 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 43 TO ITERATE

100.0% PROCESSED 43 ITERATIONS 1 ANSWERS  
 SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

=> FILE CAPLUS  

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST  | 161.33           | 161.54        |

FILE 'CAPLUS' ENTERED AT 14:29:43 ON 29 APR 2005  
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FILE COVERS 1907 - 29 Apr 2005 VOL 142 ISS 19  
FILE LAST UPDATED: 28 Apr 2005 (20050428/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L3

L4 3 L3

=> D 1-3 IBIB ABS HITSTR

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:29032 CAPLUS

DOCUMENT NUMBER: 142:114074

TITLE: Preparation of polyazido carboxylic acid esters

INVENTOR(S): Dave, Paritosh R.; Duddu, Raja G.; Damavarapu, Reddy; Gelber, Nathaniel; Yang, Kathy; Surapaneni, C. Rao

PATENT ASSIGNEE(S): United States Dept. of the Army, USA

SOURCE: U.S., 9 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

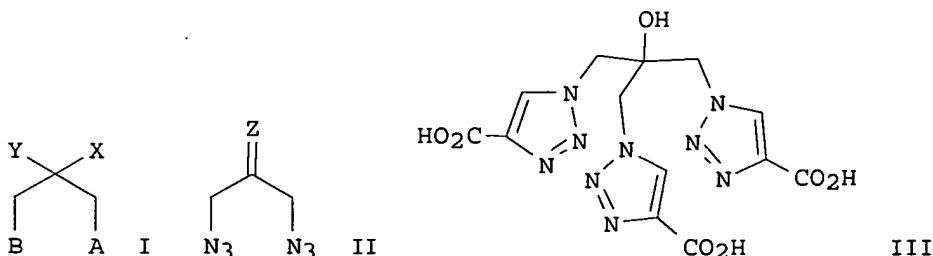
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE       |
|------------------------|------|----------|-----------------|------------|
| US 6841690             | B1   | 20050111 | US 2003-604778  | 20030815   |
| PRIORITY APPLN. INFO.: |      |          | US 2002-319801P | P 20021219 |

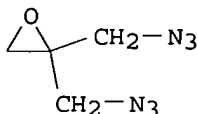
GI



AB This invention relates to a series of novel compds., such as I [X = N3, OH, ONO2, NO2; Y = CH2N3, NO2; A, B = N3, 4-carboxytriazolomethyl], and II [Z = CH2, O, NOH, 2,4-dihydrophenylhydrozono], including 2-azido-2-azidomethyl-1,3-diazidopropane, 2-azidomethyl-2-hydroxy-1,3-diazidopropane, 2-azidomethyl-2-nitrato-1,3-diazidopropane, 2-azidomethyl-2-nitro-1,3-diazidopropane, 2,2-dinitro-1,3-diazidopropane, methallyldiazide, a dimer of methallyldiazide, comprising 3a,8a-bis-azidomethyl-3a,4,8a,9-tetrahydro-3H,8H-bis[1,2,3]triazolo[1,5-a;

1'',5''-d]pyrazine, 1,3-diazidoacetone, and 2-oximido-1,3-diazidopropane. Also shown are reaction intermediates of these compds., including 2,2-bis(chloromethyl)oxirane, and 2,2-bis(azidomethyl)oxirane. In addition, a number of potentially useful energetic compds. have been prepared from the low mol. weight polyazido compds. above, including N-2(azido-1-azidomethyl-ethylidene)-N''-(2,4-dinitrophenyl)-hydrazine (7-DNPH), 1,3-bis(4-carboxytriazolyl)2,2-dinitropropane, tris(4-carboxytriazolomethyl)methanol, benzene-1,3,5-tricarboxylic acid tris(2-azido-1,1-bisazidomethyl-ethyl)ester, adamantane 1,3,5,7-tetracarboxylic acid tetrakis(2-azido-1,1-bisazidomethyl-ethyl)ester, adamantane carboxylic acid (2-azido-1,1-bisazidomethyl-ethyl)ester, cubane 1,3,5,7-tetracarboxylic acid tetrakis(2-azido-1,1-bisazidomethyl-ethyl)ester, cubane 1,4-dicarboxylic acid bis(2-azido-1,1-bisazidomethyl-ethyl)ester. Thus, tris(4-carboxytriazolomethyl)methanol (III) was prepared by the reaction of 2-azidomethyl-2-hydroxy-1,3-diazidopropane I [A, B = N<sub>3</sub>; X = CH<sub>2</sub>N<sub>3</sub>; Y = OH] (also prepared) with propiolic acid.

IT **481067-60-1P**, 2,2-Bis(azidomethyl)oxirane  
 RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of polyazido carboxylic acid esters derived from methallyl dichloride)  
 RN 481067-60-1 CAPLUS  
 CN Oxirane, 2,2-bis(azidomethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:137939 CAPLUS

DOCUMENT NUMBER: 140:357709

TITLE: Preparation of cage molecule based polyazido core units for dendrimer synthesis

AUTHOR(S): Dave, Paritosh R.; Duddu, Raja; Yang, Kathy; Damavarapu, Reddy; Gelber, Nathaniel; Surapaneni, Rao; Gilardi, Richard

CORPORATE SOURCE: GEO-CENTERS, INC. at ARDEC, Picatinny Arsenal, NJ, 07806-5000, USA

SOURCE: Tetrahedron Letters (2004), 45(10), 2159-2162  
 CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

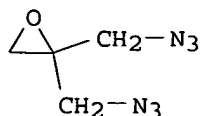
LANGUAGE: English

AB Core mols. based on benzene-, cubane-, and adamantane-polycarboxylates with peripheral polyazido substitution were prepared. The first synthesis of 1,3-diazidoacetone and its conversion to the corresponding oxime, DNPH, and 2,2-dinitro derivs. is also reported. All azido compds. should be considered dangerous and proper precautions should be taken during handling and storage of these mols.

IT **481067-60-1P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate; preparation of peripheral polyazido and benzene and cubane and adamantane core unit cages for triazole and tetrazole containing dendrimer synthesis)

RN 481067-60-1 CAPLUS

CN Oxirane, 2,2-bis(azidomethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:605702 CAPLUS

DOCUMENT NUMBER: 138:75615

TITLE: Novel polyazido/polynitrato compounds derived from methallyl dichloride

AUTHOR(S): Surapaneni, Rao; Damavarapu, Reddy; Duddu, Raja; Dave, Paritosh R.; Gilardi, Richard D.

CORPORATE SOURCE: US Army Armament Research Development and Engineering Center, Picatinny Arsenal, NJ, 07806-5000, USA

SOURCE: International Annual Conference of ICT (2002), 33rd(Energetic Materials), 147/1-147/5  
CODEN: IACIEQ; ISSN: 0722-4087

PUBLISHER: Fraunhofer-Institut fuer Chemische Technologie

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Several polynitrato and polyazido compds., derived from a lower homolog of pentaerythritol and have one less methylene unit, were synthesized in order to develop lead-free primary explosives. The compds. were derived from methallyl dichloride by such reactions as epoxidn., nucleophilic substitution, and ring-opening nitration. Nitration. These compds. are of potential interest as energetic plasticizers and their multiple functional groups can be exploited to prepare novel dendritic structures.

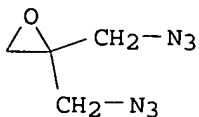
IT **481067-60-1P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and reactions of; novel polyazido-polynitrato compds. derived from methallyl dichloride by epoxidn., nucleophilic substitution, and ring-opening nitration)

RN 481067-60-1 CAPLUS

CN Oxirane, 2,2-bis(azidomethyl)- (9CI) (CA INDEX NAME)



=> LOGOFF

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:Y

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL   |
|------------|---------|
| ENTRY      | SESSION |
| 15.27      | 176.81  |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL   |
|------------|---------|
| ENTRY      | SESSION |
| -2.19      | -2.19   |

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